

BookletChart™

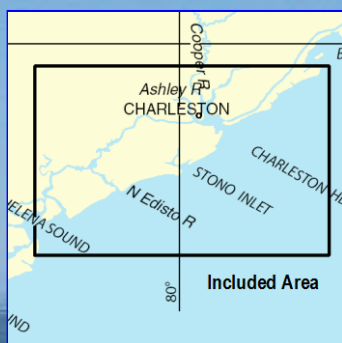
Charleston Harbor and Approaches

NOAA Chart 11521

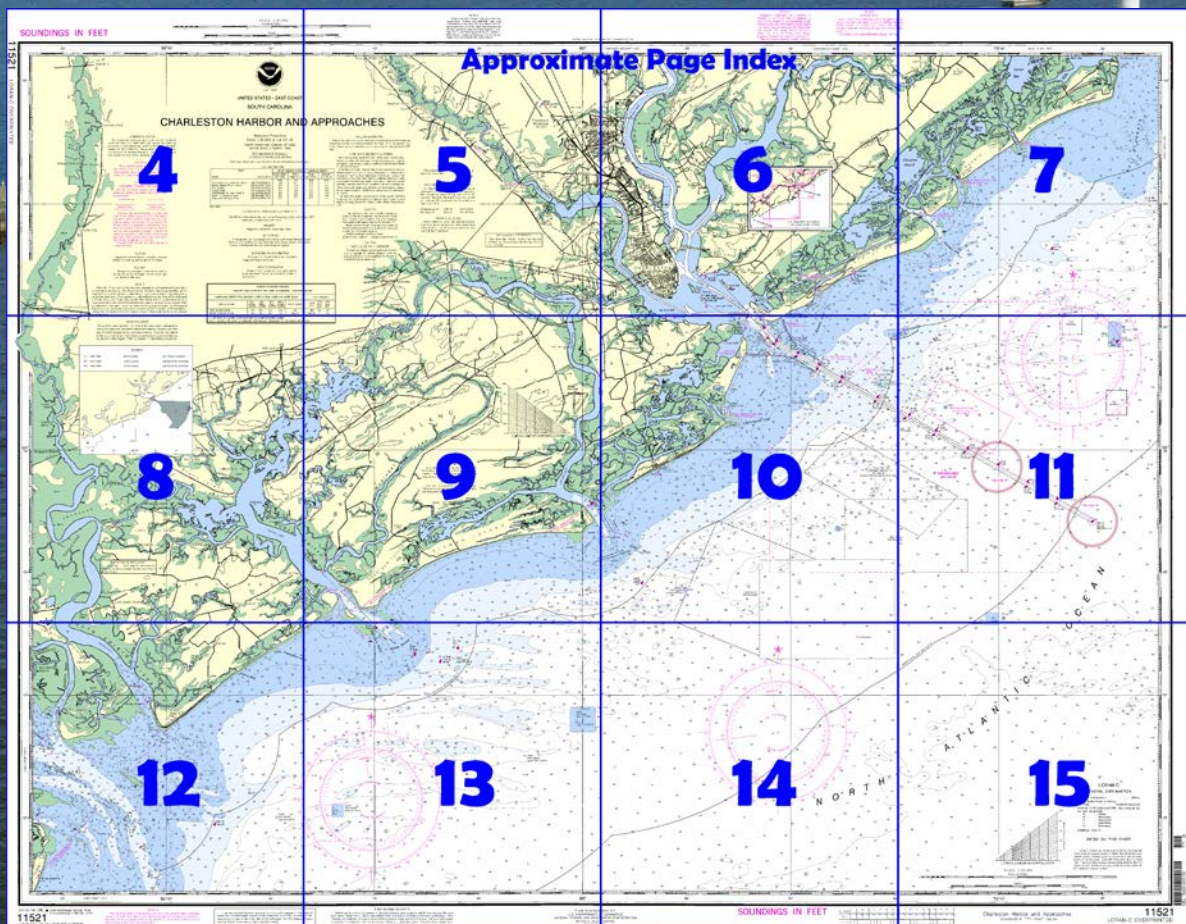


A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=11521>



(Selected Excerpts from Coast Pilot)
Lighthouse Inlet (32°41.2'N., 79°53.0'W.), between **Morris Island** and **Folly Island** has no channel across the bar; entrance should be attempted only with local knowledge on a rising tide with a smooth sea. The depth over the bar and to **Secessionville** was 3 feet; the inlet is unmarked and used by local fishermen. Small craft pass into Charleston Harbor by way of **Lighthouse Creek** and into sloughs north of Folly Island. **Stono Inlet** is entered over a shifting bar

between Folly Island and **Kiawah Island**. A lighted gong buoy is south of the entrance. The inlet is subject to continual change and should not be

attempted without local knowledge. The entrance buoys are not charted, because they are shifted in position to mark the best water. **Stono River** in its upper reach above **Elliott Cut** forms part of the Intracoastal Waterway. The depth inside the inlet bar for 12 miles to the highway bridge was 11 feet, thence 7 feet to Elliott Cut. Vessels enter the river by way of the waterway from Charleston. In the summer, pleasure craft use Stono River and Folly River to reach Folly Beach. The bridge a mile below Elliott Cut has a clearance of 8 feet.

Caution.—The areas generally to the east and southeast of Charleston Harbor are used extensively by the U.S. Navy and other military services to conduct various types of surface, subsurface, and aircraft training exercises. Fleet Area Control and Surveillance Facility (FACSFAC), Jacksonville, FL, exercises cognizance of the operating areas, makes area assignments, ensures promulgation of firing notices, issues schedules, and prescribes necessary additional regulations.

The entrance to Charleston Harbor is between converging jetties. The north jetty is almost completely submerged at MHW. There are no lights on the jetties and smaller craft approaching from the north close to shore at MHW should exercise extreme caution not to confuse the south jetty for the north jetty. It is recommended all vessels align seaward of Lighted Buoy 18 before final approach to the jetty entrance.

Dangers.—The danger area of a former World War II minefield is off the entrance to Charleston Harbor. The area is open to unrestricted surface navigation but all vessels are cautioned not to anchor, dredge, trawl, lay cables, bottom, or conduct any similar type of operation because of residual danger from mines on the bottom. An **“anchor at your own risk”** anchorage, within the danger area, is on the north side of the entrance channel about 7 miles NW of Charleston Entrance Lighted Whistle Buoy C. The rectangular anchorage is enclosed by the following points:

32°42.9'N., 79°42.8'W.;
32°41.3'N., 79°39.3'W.;
32°39.9'N., 79°40.2'W.; and
32°41.6'N., 79°43.7'W.

The area has been searched on many occasions and no unexploded ordnance has been discovered. Vessels have routinely anchored in this offshore anchorage for many years without mishap.

A regulated navigation area extends northeastward and southeastward along the northern side of the entrance channel from Charleston Entrance Channel Lighted Buoy 16. (See **165.714**, chapter 2, for limits and regulations.)

Currents.—Off the entrance to Charleston Harbor the tidal currents are rotary with velocities of about 1 knot. Near the entrance to the jetties the current sets fair with the channel at strengths of flood and ebb and can be expected to set across the channel with a velocity of about 0.2 knot about 3 hours after strength of flood and ebb, setting northeastward and southwestward, respectively.

Pilotage, Charleston.—Pilotage is compulsory for all foreign vessels and for all U.S. vessels under register in the foreign trade.

Quarantine, customs, immigration, and agricultural quarantine.—(See chapter 3, Vessel Arrival Inspections, and Appendix A for addresses.)

Restricted areas are in the northern portion of Shipyard Creek, and in the Cooper River at the U.S. Government facility. (See **334.460** and **334.470**, chapter 2, for limits and regulations.)

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Miami	Commander	
	7th CG District	(305) 415-6800
	Miami, FL	

SOUNDINGS IN FEET

SCALE 1:80,000
Nautical Miles



11521



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - EAST COAST

SOUTH CAROLINA

CHARLESTON HARBOR AND A

Mercator Projection
Scale 1:80,000 at Lat 32° 40'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

TIDAL INFORMATION

NAME	PLACE (LAT/LONG)	Height referred to datum of soundings		
		Mean Higher High Water	Mean High Water	Mean Lower Low Water
Goose Creek Entrance	(32°55'N/079°57'W)	5.9	5.6	5.4
Charleston, Customhouse Wharf	(32°47'N/079°56'W)	5.8	5.4	5.3
Fort Sumter	(32°45'N/079°53'W)	5.6	5.3	5.0
Rockville, Bohicket Creek	(32°36'N/080°12'W)	6.3	6.0	5.7
Seabrook, Ashepoo River	(32°31'N/080°24'W)	6.7	6.4	6.0
Edisto Beach, Edisto Island	(32°30'N/080°18'W)	6.3	6.0	5.7
Otter Island, St. Helena Sound	(32°29'N/080°25'W)	6.6	6.2	5.9

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water level predictions, and tidal current predictions are available on the internet from <http://tidesandcurrents.noaa.gov> (Nov. 2010).

For Symbols and Abbreviations see Chart No. 1

COLREGS: International Regulations for Preventing Collisions at Sea, 1972
Demarcation lines are shown thus: - - - - -

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the U.S. Coast Guard, Geological Survey, and National Geospatial-Intelligence Agency.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 4 for important supplemental information.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CHARLESTON HARBOR ENTRANCE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO SEP 2012

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJ. WIDTH (FEET)
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	
ENTRANCE CHANNEL	45.5	46.6	47.4	46.3	9-12	A1000
MOUNT PLEASANT RANGE	45.9	50.3	50.2	49.1	9-12	1000-600

A. MAINTAINED 800 FEET WIDE.

B. FOR WIDTH OF 1000 FEET, THE PROJECT DEPTH IS 42 FEET FOR OUTER 100 FEET.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

HORIZONTAL DATUM

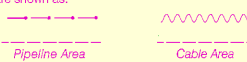
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.
Covered wells may be marked by lighted or unlighted buoys.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

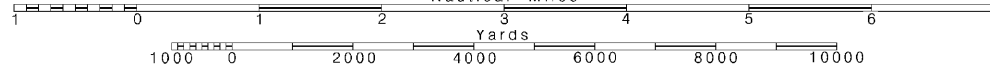
A 1990-2008	NOS Surveys	full bottom coverage
B2 1970-1989	NOS Surveys	partial bottom coverage
B3 1940-1969	NOS Surveys	partial bottom coverage

Joins page 8

Printed at reduced scale.

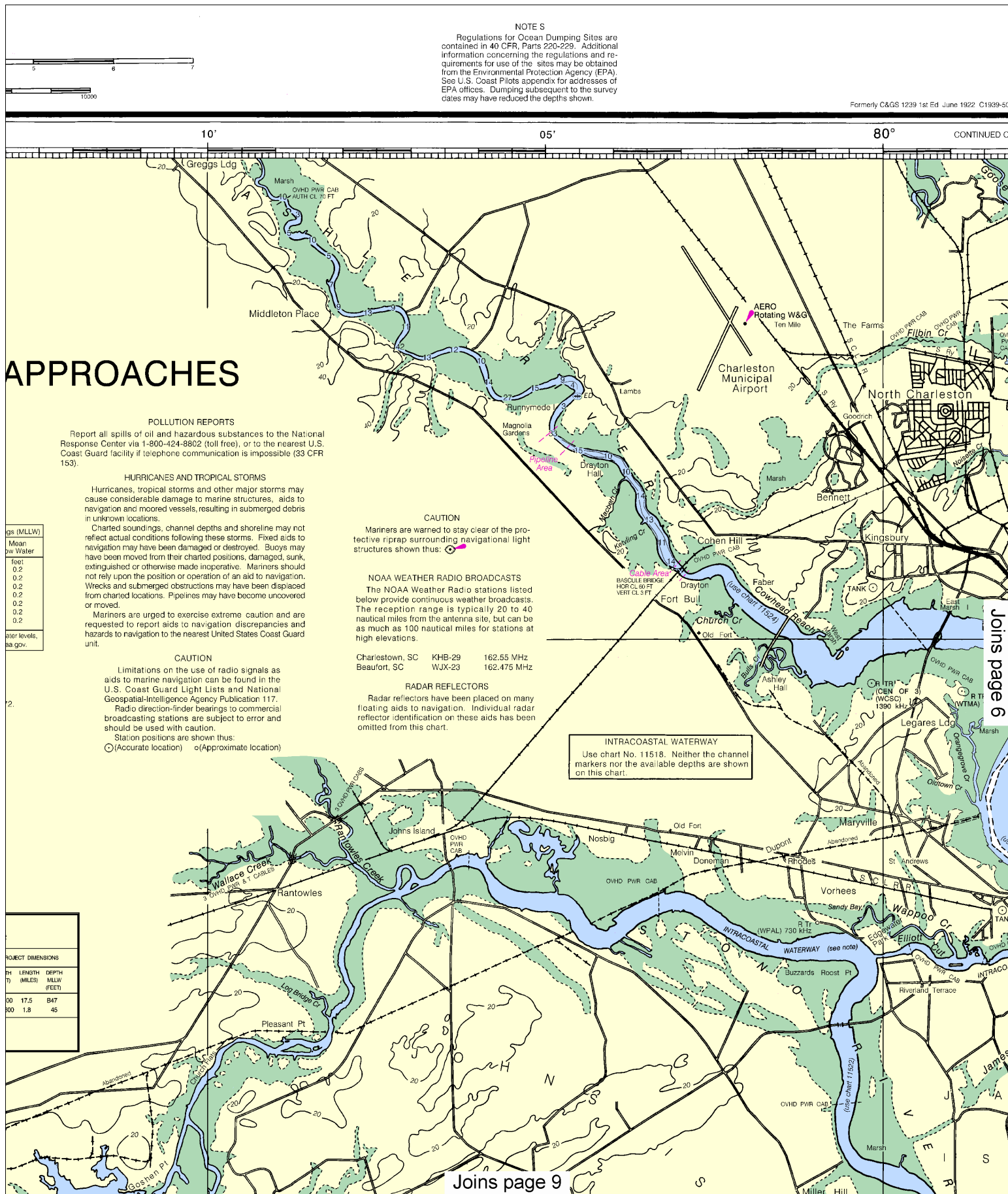
SCALE 1:80,000
Nautical Miles

See Note on page 5.



4

Note: Chart grid lines are aligned with true north.



APPROACHES

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

HURRICANES AND TROPICAL STORMS

Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations.

Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved.

Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
○ (Accurate location) ◐ (Approximate location)

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Charlestown, SC KHB-29 162.55 MHz
Beaufort, SC WJX-23 162.475 MHz

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

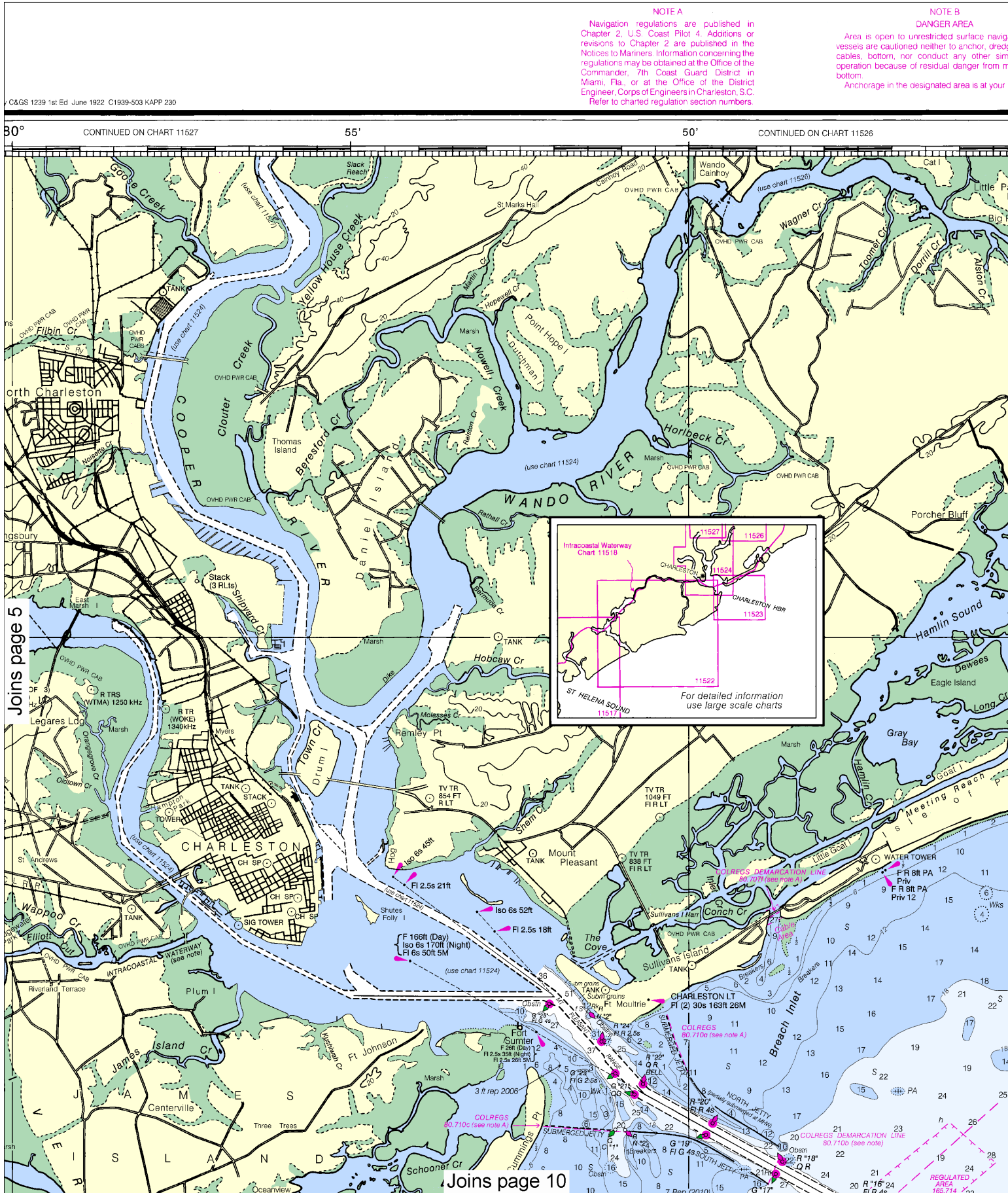
INTRACOASTAL WATERWAY

Use chart No. 11518. Neither the channel markers nor the available depths are shown on this chart.

gts (MLLW)
Mean
Low Water
feet
0.2
0.2
0.2
0.2
0.2
0.2
Water levels, sea gov.

PROJECT DIMENSIONS		
PH T)	LENGTH (MILES)	DEPTH MLLW (FEET)
00	17.5	B47
300	1.8	45

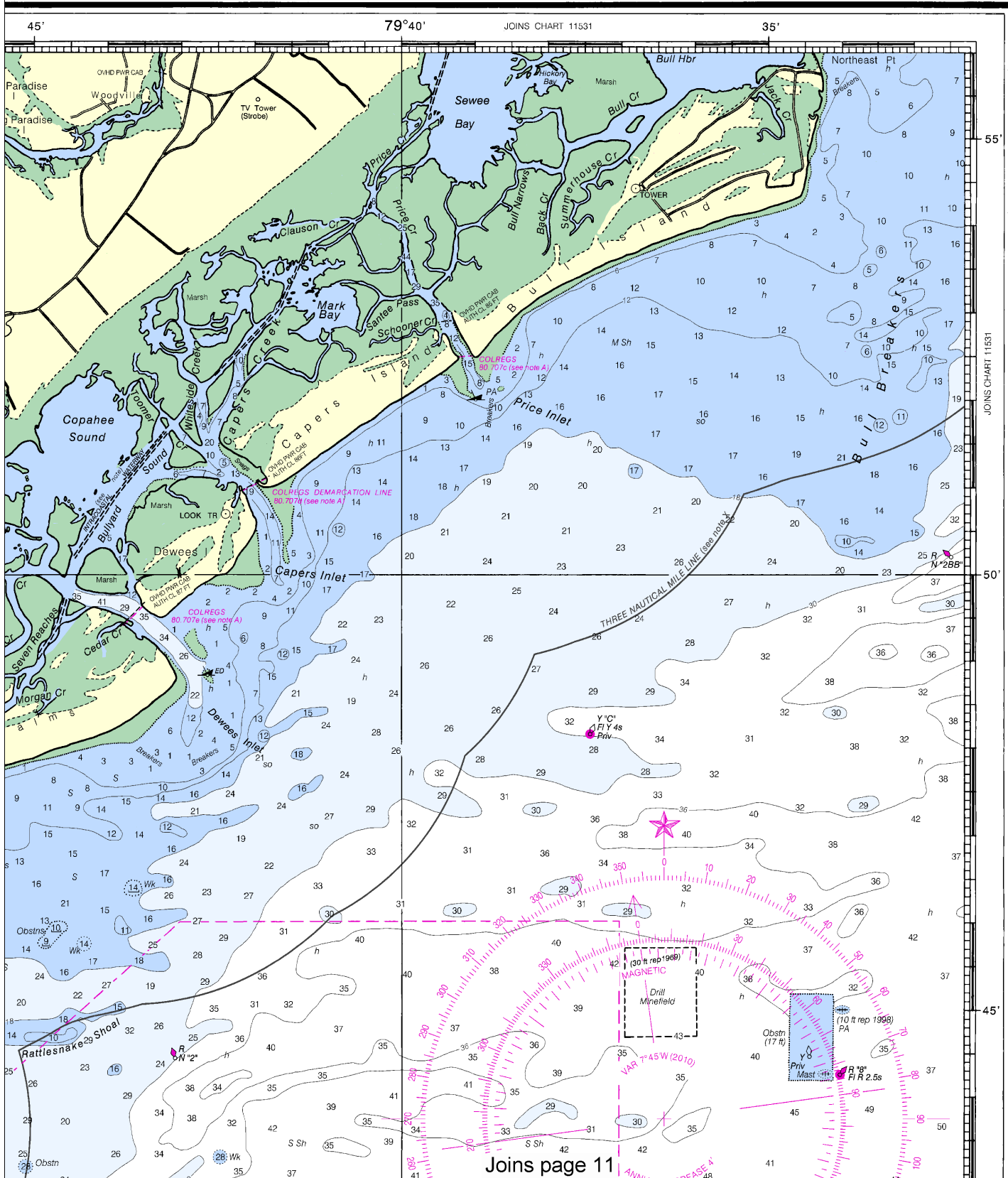
This BookletChart was reduced to 70% of the original chart scale. The new scale is 1:114286. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



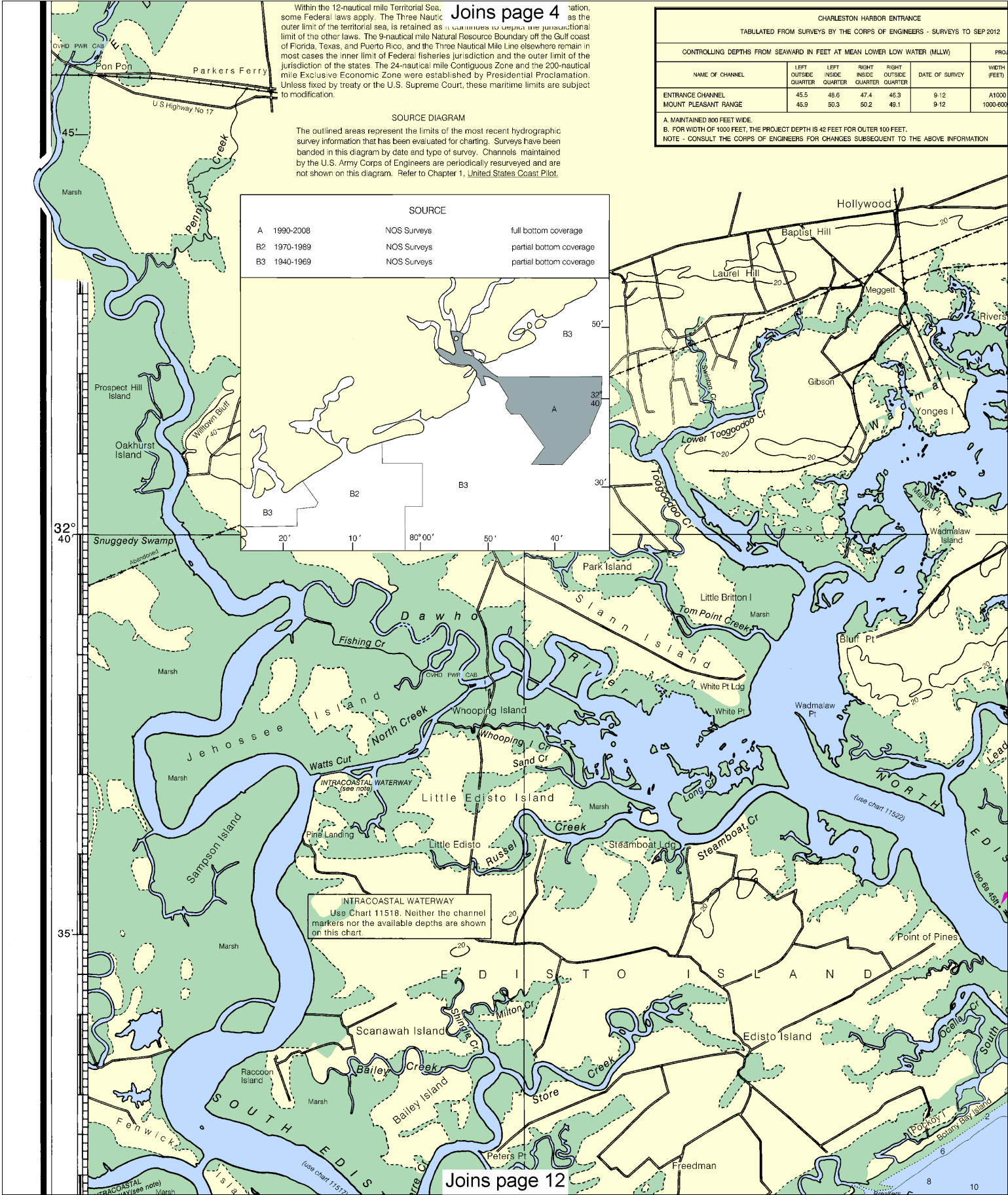
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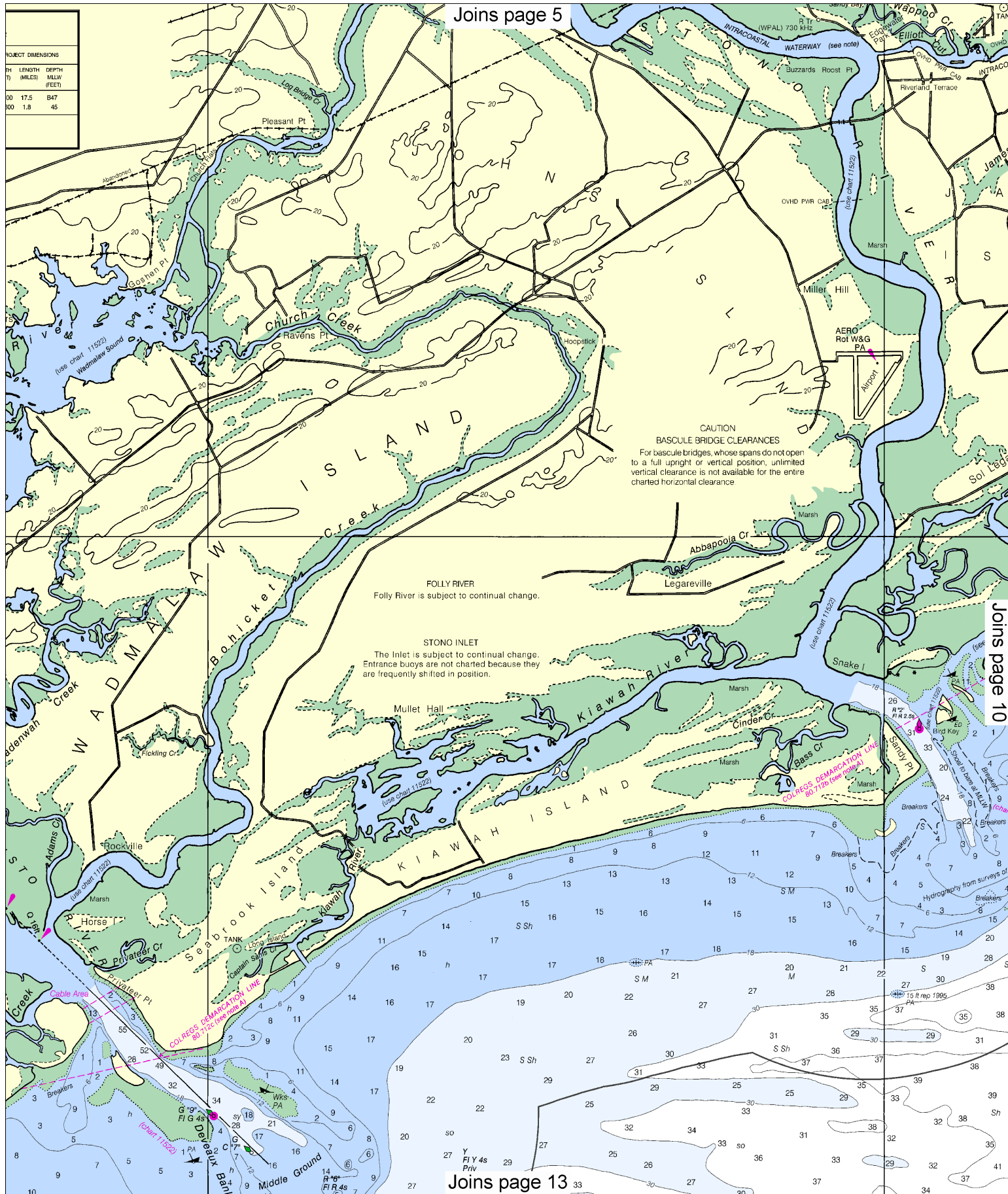
Note: Chart grid lines are aligned with true north.

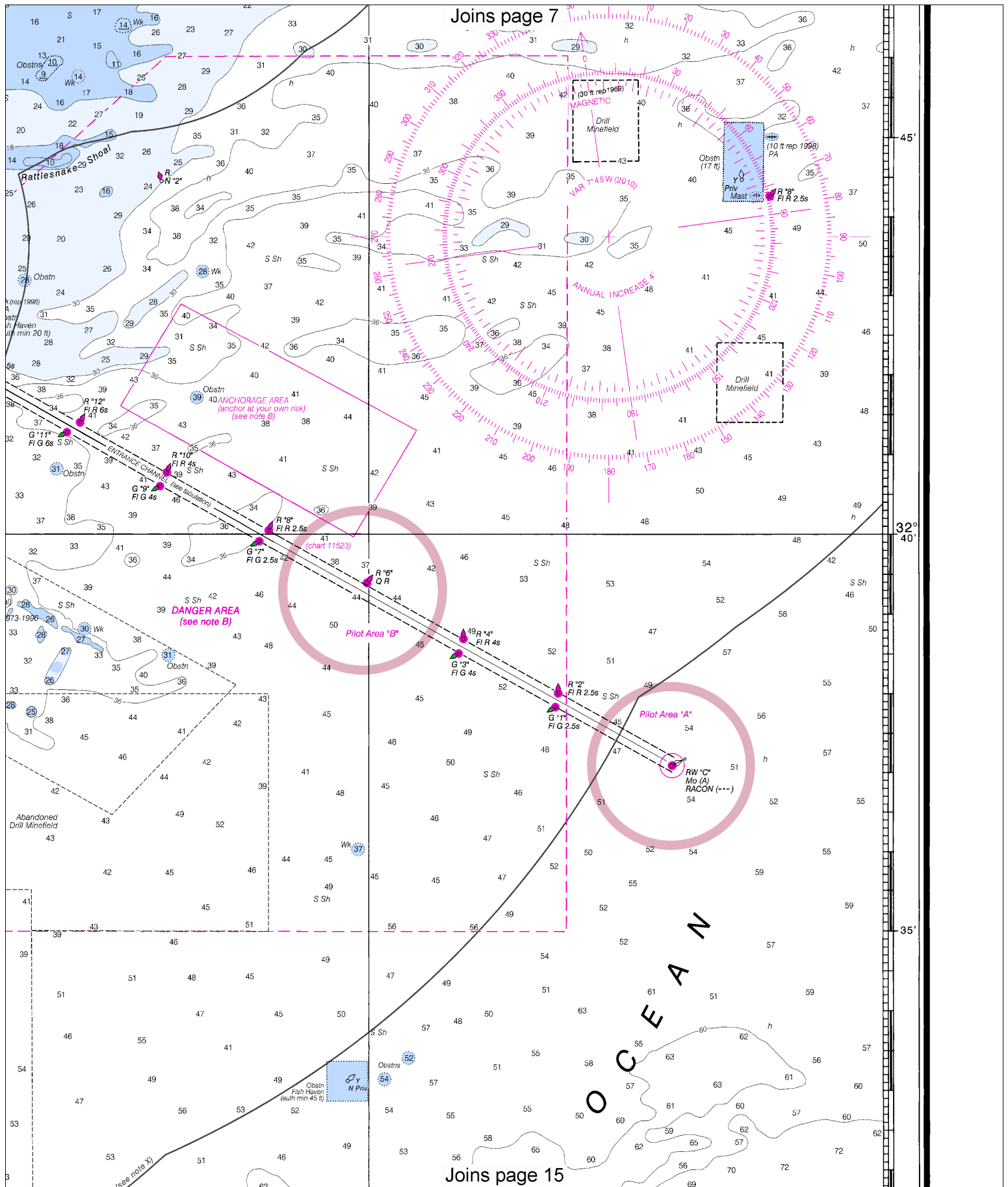
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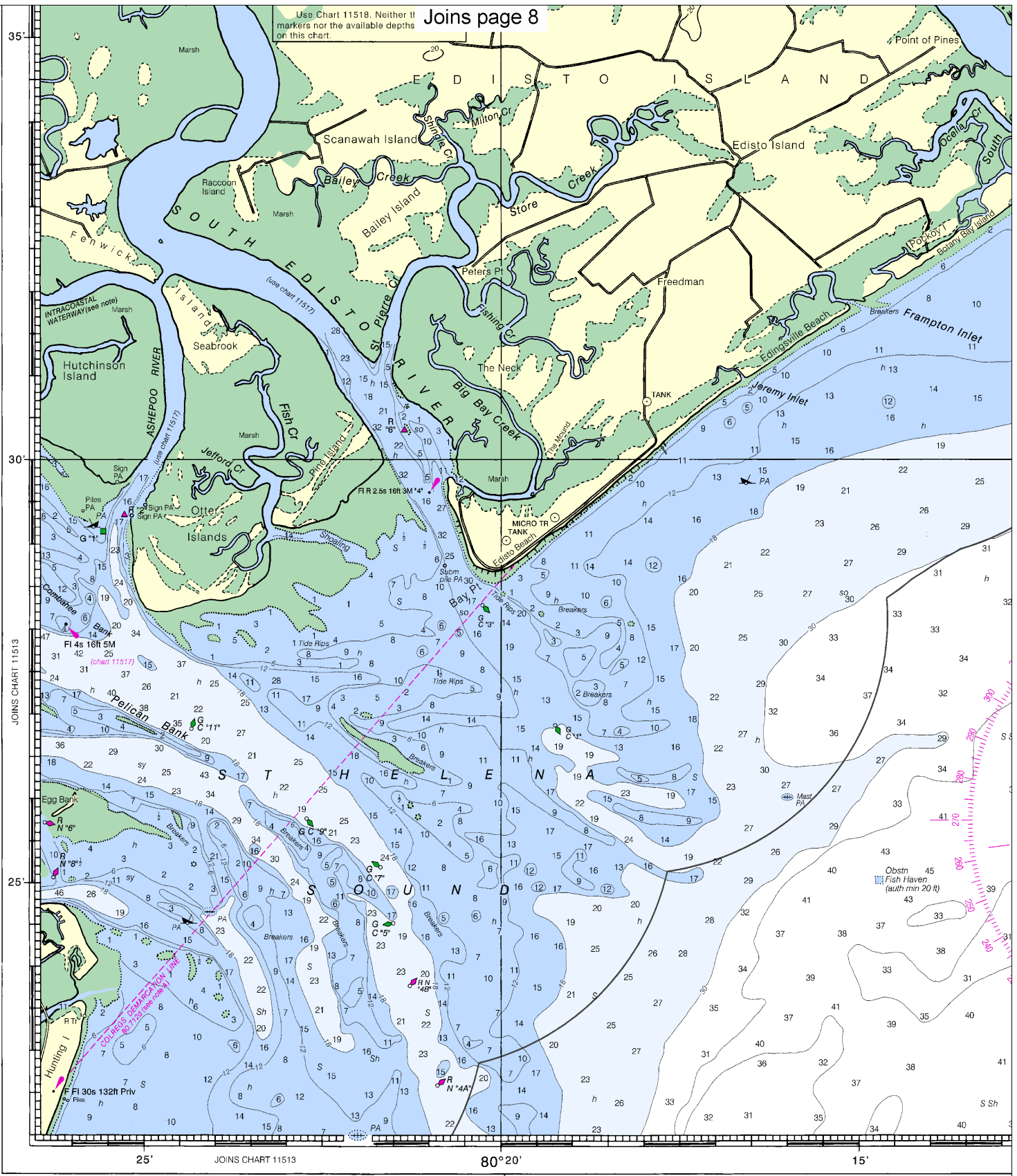
This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 4912 12/4/2012,
 NGA Weekly Notice to Mariners: 4912 12/8/2012,
 Canadian Coast Guard Notice to Mariners: n/a.







Use Chart 11518. Neither it
markers nor the available depths
on this chart.



30th Ed., Dec. 1/10
Corrected through NM Dec. 11/10
Corrected through LNM Dec. 07/10

11521

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

This nautical chart has been designed to Ocean Service encourages users to submit or improving this chart to the Chief, Marine Chart Service, NOAA, Silver Spring, Maryland 209

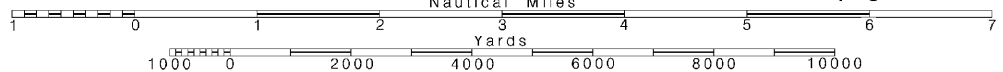
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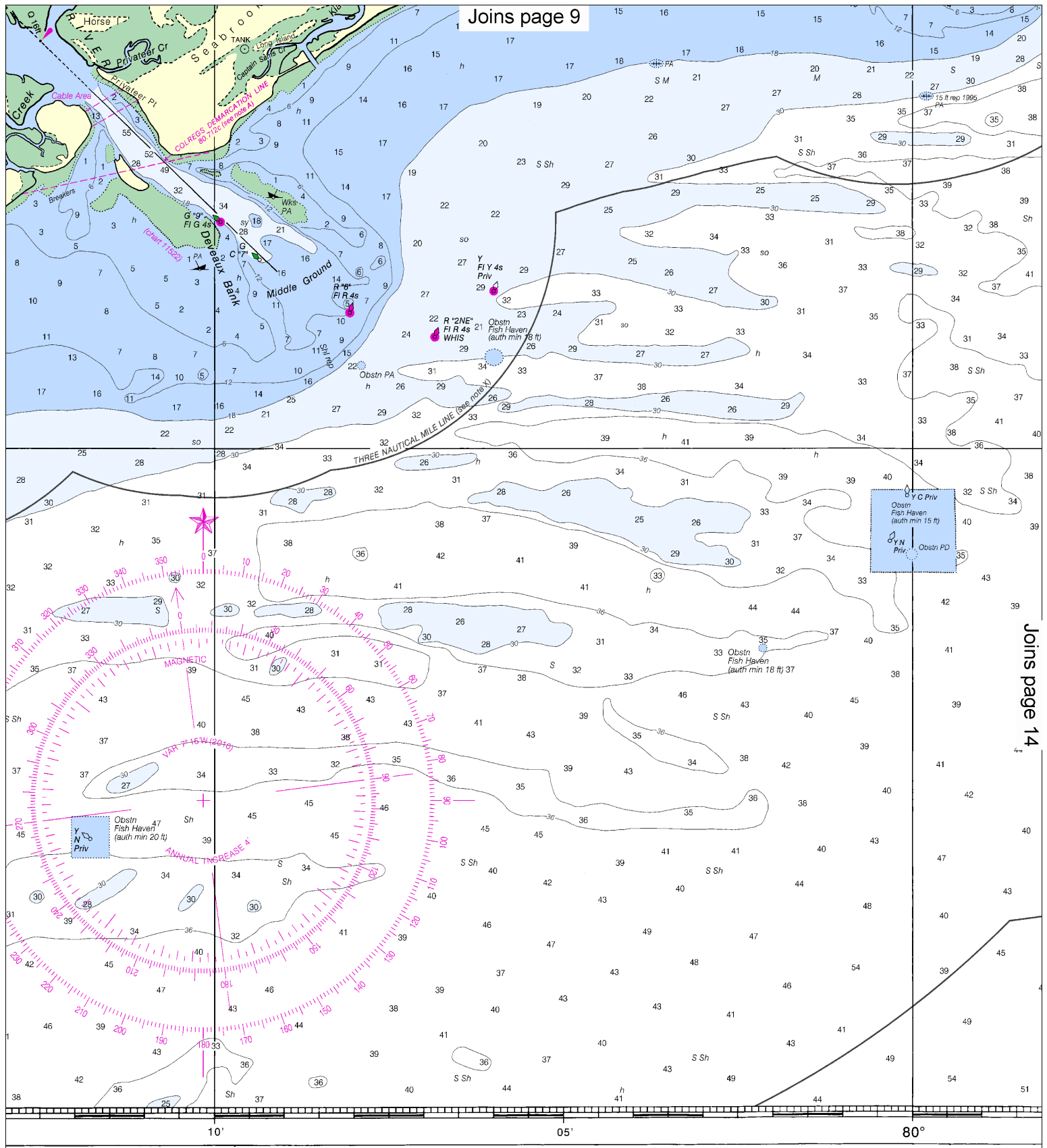
Note: Chart grid
lines are aligned
with true north.

Printed at reduced scale.

SCALE 1:80,000
Nautical Miles

See Note on page 5.

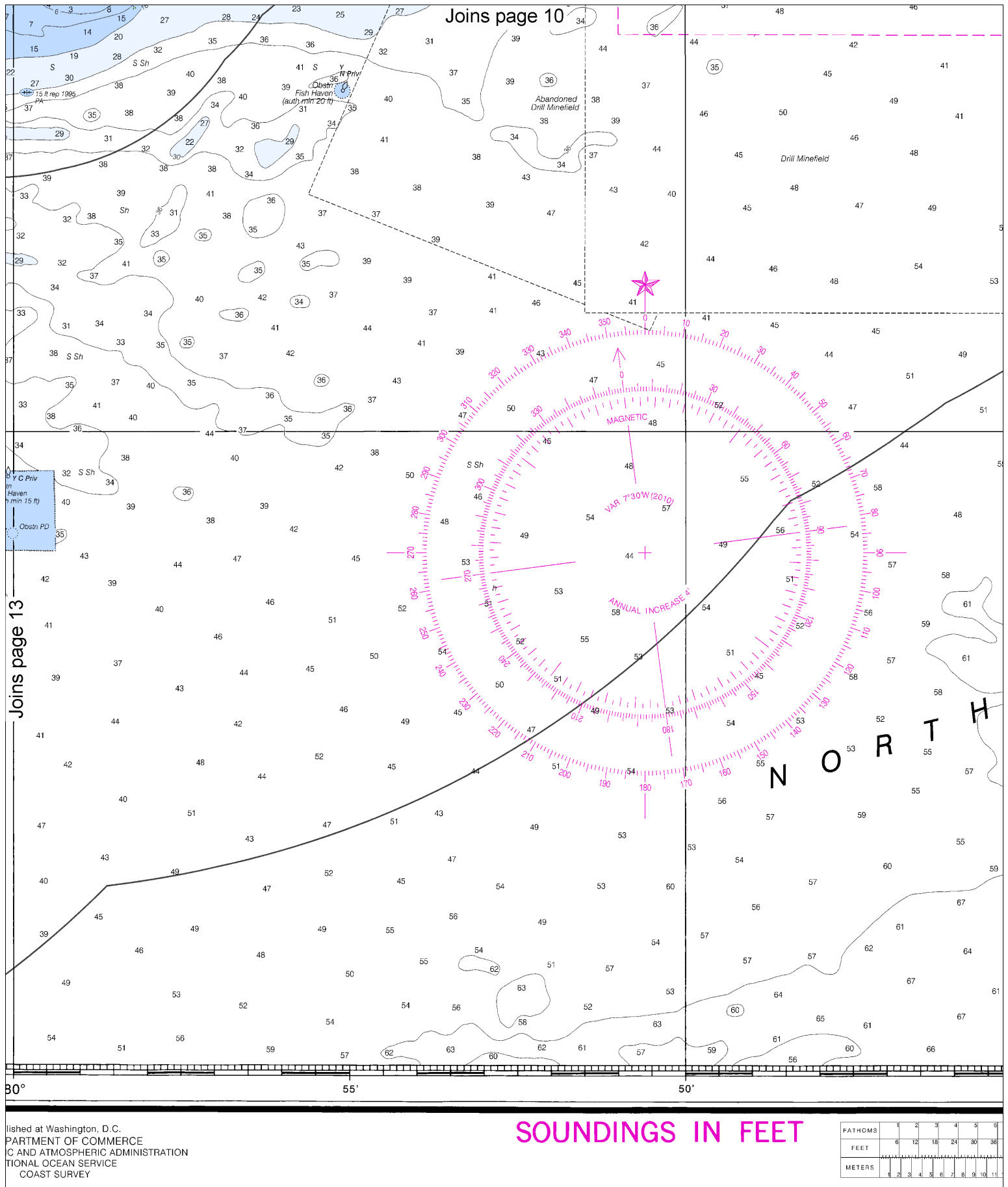




to promote safe navigation. The National Corrections, additions, or comments for chart Division (N/CS2), National Ocean 910-3282.

PRINT-ON-DEMAND CHARTS
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 2-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at <http://ocsdna.nod.noaa.gov/drs/inquiry.aspx>, or OceanGrafix at 1-877-56CHART or <http://www.oceangrafix.com>.

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U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



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 DEPARTMENT OF COMMERCE
 NAUTICAL AND ATMOSPHERIC ADMINISTRATION
 NATIONAL OCEANIC SERVICE
 COAST SURVEY

SOUNDINGS IN FEET

FATHOMS	1	2	3	4	5	6
FEET	6	12	18	24	30	36
METERS	1	2	3	4	5	6

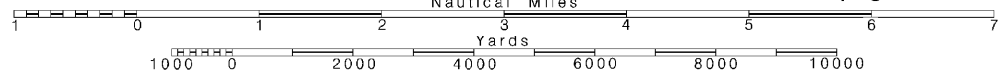
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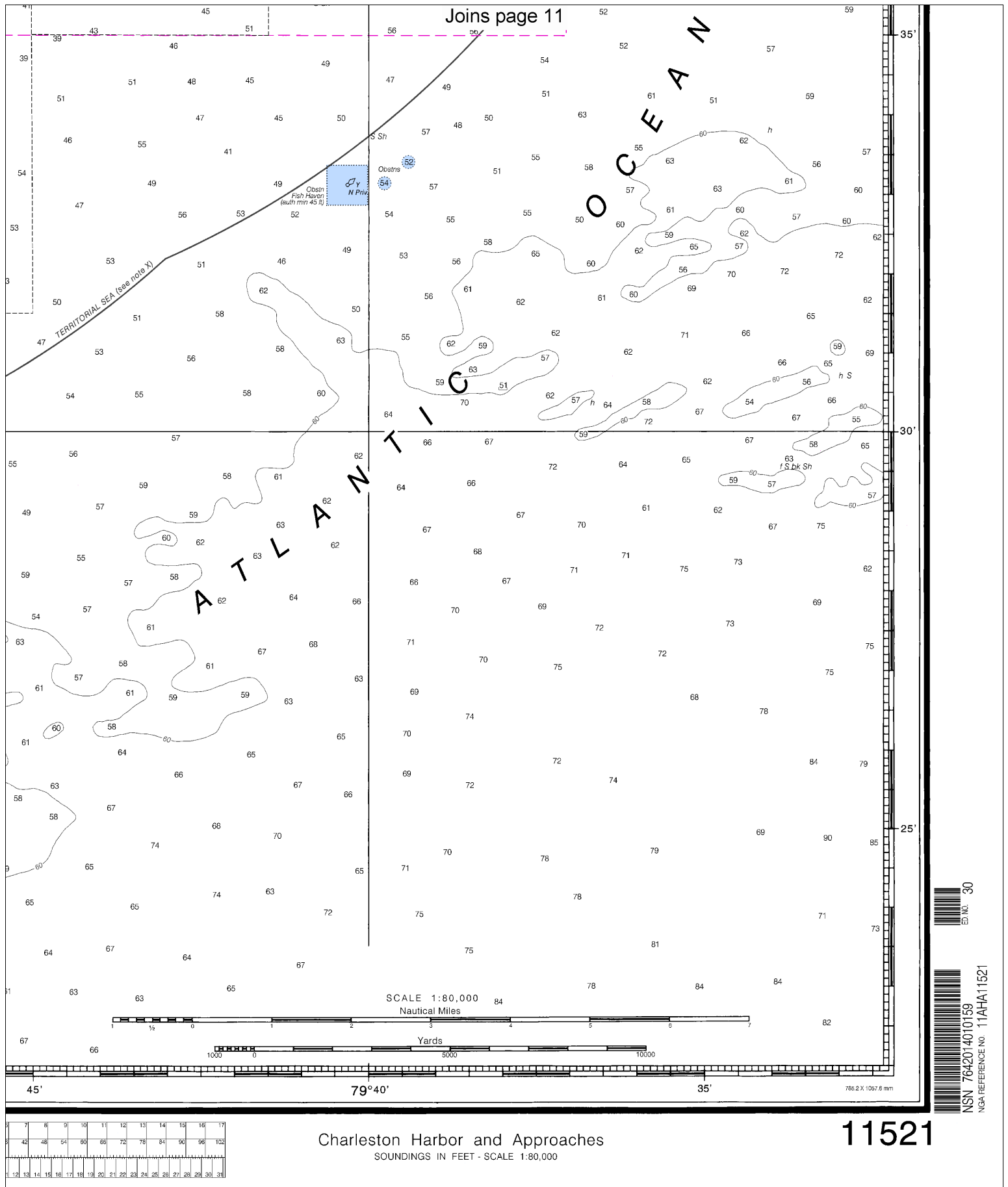
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:80,000
 Nautical Miles

See Note on page 5.





ED NO. 30
 NSN 7642014010159
 NSA REFERENCE NO. 11AHA11521

11521



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Quick References

Nautical chart related products and information	—	http://www.nauticalcharts.noaa.gov
Online chart viewer	—	http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html
Report a chart discrepancy	—	http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	—	http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	—	http://www.nowcoast.noaa.gov/
National Weather Service	—	http://www.weather.gov/
National Hurricane Center	—	http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	—	http://ptwc.weather.gov/
Contact Us	—	http://www.nauticalcharts.noaa.gov/staff/contact.htm



— For the latest news from Coast Survey, follow @nauticalcharts



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

NOAA's Office of Coast Survey



The Nation's Chartmaker